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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,309	07/29/2003	J. R. Patil	U 014742-0	6603
140	7590	03/12/2007	EXAMINER	
LADAS & PARRY			KOSSON, ROSANNE	
26 WEST 61ST STREET			ART UNIT	
NEW YORK, NY 10023			PAPER NUMBER	
			1652	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/12/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/629,309

Applicant(s)

PATIL ET AL.

Examiner

Rosanne Kosson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20,21 and 24-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-27 is/are allowed.
- 6) ☒ Claim(s) 20,21 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

The amendment filed on February 14, 2007 has been received and entered. Claims 24 and 25 have been amended. Claims 22 and 23 have been canceled. Claims 26 and 27 have been added. Accordingly, claims 20, 21 and 24-27 are examined on the merits herewith.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Biological Deposit***

Upon reconsideration of the claims, the request for biological deposit information is withdrawn.

### ***Claim Rejections - 35 USC § 112, first paragraph***

In view of Applicants' amendments to the claims, claims 24 and 25 now depending from claim 27 rather than claim 20 or 21, the written description and enablement rejections with respect to claims 24 and 25 are withdrawn.

Claims 20 and 21 are again rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, claim 20 recites a bioemulsifier from any *Acinetobacter* strain isolated from human skin that retains 35% stability after 140 hours at 10° C. Claim 21 recites a bioemulsifier from any *Acinetobacter junii* that has this same property. The specification discloses only one such bioemulsifier, the one from Applicants' strain SC-14. This rejection was

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discussed in the previous Office actions.

Applicants have not responded to this rejection. They have merely requested reconsideration of their remarks in their previous response. But, in the previous response, Applicants did not respond to this rejection. Applicants still have not explained how or where the specification or the prior art describes additional species of the claimed genus. Therefore, the rejection of record is maintained.

Claims 20 and 21 are also again rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a bioemulsifier from SC14, does not reasonably provide enablement for a bioemulsifier from any *Acinetobacter* strain isolated from human skin that retains 35% stability after 140 hours at 10° C. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims. This rejection was discussed in the previous Office action.

Applicants have not responded to this rejection. They have merely requested reconsideration of their remarks in their previous response. But, in the previous response, Applicants did not provide persuasive arguments as to why undue experimentation would not be required to practice the full scope of the claimed invention or why one of skill in the art would be able to predict that species of the claimed genus beyond the one disclosed species could be discovered based on the instant specification and the prior art.

Therefore, the rejection of record is maintained.

***Claim Rejections - 35 USC § 112, second paragraph***

In view of Applicants' amendments to the claims, claim 25 now depending from claim 27

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rather than claim 20 or 21, the rejection with respect to claims 25 is withdrawn.

Claims 20 and 21 are again rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection was discussed in the previous Office action. To reiterate, it cannot be determined if 35% stability refers to the percentage of an emulsion that remains in one phase or the percentage of the emulsifier that remains intact without decomposing. Additionally, the ratio of oil or fat to water in the emulsion that has 35% stability and the nature of the oily phase and the aqueous phase are not defined. Consequently, the metes and bounds of the claims are indefinite. Applicants have not responded to this rejection. They have merely requested reconsideration of their remarks in their previous response. But, in the previous response, Applicants did not address this rejection. Therefore, the rejection of record is maintained.

Claim 24 still recites the limitations "esterase activity" and "esterase" and has been amended to recite the term "fermentation medium." There is insufficient antecedent basis for these limitations in the claim, as claim 27 does not recite an esterase or a fermentation medium. Additionally, claim 24 is indefinite and confusing because the relationship between the esterase and the bioemulsifier is not clear. Is the esterase part of the protein component of the bioemulsifier? Is the esterase contained in the cells and partially secreted or bound to the cells and partially released (i.e., what does "associated with cells" mean)? The claim must be amended to state clearly the relationship between the esterase and the bioemulsifier. Also, this claim is confusing because it recites the steps of measuring enzyme activity (performing an enzyme assay) at the same time that the esterase is secreted into fermentation medium (at the same time that the cells are used in an enzyme assay, they are being propagated in a fermentor. This is a product claim that recites two method steps that cannot be performed

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simultaneously. Appropriate correction is required. If accurate, the claim may be amended to recite the bioemulsifier of claim 27, wherein the protein comprises an esterase.

***Claim Rejections - 35 USC § 102/103***

Claim 20 is again rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gutnik et al. (US 4,230,801). Gutnik discloses a bioemulsifier produced by *Acinetobacter* (species not specified) comprising protein, polysaccharide and lipid that appears to be the same as Applicants' claimed bioemulsifier, as the Office does not have the facilities and resources to determine whether or not the two bioemulsifiers are different. Applicants have not shown that the two bioemulsifiers are different. This rejection was discussed in the previous Office action.

Applicants have not responded to this rejection. They have merely requested reconsideration of their remarks in their previous response (i.e., the response of July 26, 2006). But, this response is a response to the Office action of February 8, 2005, which was based on a different set of claims and did not contain the rejection of the Office action of August 14, 2006. Thus, Applicants have not responded to this rejection at any point in time.

Therefore, the rejection of record is maintained.

***Claim Rejections - 35 USC § 103***

In view of Applicants' amendments to the claims, claims 24 and 25 now depending from claim 27 rather than claim 20 or 21, the rejection with respect to claims 24 and 25 is withdrawn.

Claims 20 and 21 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Gutnik et al. (US 4,230,801); Shabtai et al. ("Emulsan: a case study of microbial capsules as industrial products," Symposium: Extracellular Microbial Polysaccharides, chap. 19, pp. 291-

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307, publication date not provided); and Zosim et al. (Biotechnology and Bioengineering 24:281-292, 1982) in view of Pola Kasei Kogyo KK (JP 53-148543). This rejection was discussed in the previous Office action.

To reiterate, the bioemulsifiers of Gutnik et al. and Shabtai et al. appear to be the same as Applicants' claimed bioemulsifier, and Applicants have not shown that the two are different. Zosim discloses the stability of the bioemulsifier of Gutnik et al., which appears to be the same as that of Applicants' bioemulsifier. Pola Kasei Kogyo discloses the reduction in viscosity of almond oil that is treated with an esterase, and the bioemulsifiers of Gutnik et al. and Shabtai et al. appear to have this same property, the ability to reduce the viscosity of almond oil, because they contain esterases.

Applicants have not responded to this rejection. They have merely requested reconsideration of their remarks in their previous response (i.e., the response of July 26, 2006). But, this response is a response to the Office action of February 8, 2005, which was based on a different set of claims and did not contain the rejection of the Office action of August 14, 2006. Thus, Applicants have not responded to this rejection at any point in time.

In view of the foregoing, the rejection of record is maintained.

### ***Conclusion***

Claims 25-27 are free of the prior art. The pending claims would be allowable upon the cancellation of claims 20 and 21 and the correction of claim 24.

Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

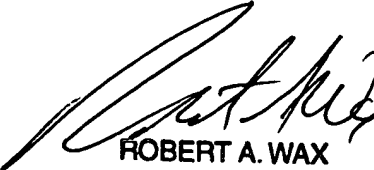
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosanne Kosson whose telephone number is 571-272-2923. The examiner can normally be reached on Monday-Friday, 8:30-6:00, alternate Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy can be reached on 571-272-0928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rosanne Kosson  
Examiner, Art Unit 1652

rk/2007-03-02

*Rosanne Kosson*

ROBERT A. WAX  
PRIMARY EXAMINER